

WHAT IS CLAIMED IS:

1. An image processing apparatus comprising:

- a natural-image input means for inputting a natural-image signal obtained by encoding a natural image;
- artificial-image input means for inputting an artificial-image signal obtained by encoding an artificial image; and
- transmission means for adaptively multiplexing the natural-image signal and the artificial-image signal according to a communication status of a communication network, and for transmitting a resulting multiplexed signal via the communication network.

2. An apparatus according to claim 1, wherein said transmission means transmits the natural-image signal when the communication network is unoccupied, and transmits the artificial-image signal when the communication network is congested.

3. An apparatus according to claim 1, wherein said transmission means multiplexes the natural-image signal and the artificial-image signal so that one screen includes the natural image and the artificial image, and transmits the resulting multiplexed image.

4. An apparatus according to claim 1, wherein said transmission means changes a ratio of the natural image to the artificial image to be multiplexed in one screen according to the communication status.

5. An apparatus according to claim 1, wherein the artificial-image signal is substituted for an object image forming the natural-image signal.

6. An apparatus according to claim 1, wherein said natural-image input means comprises image pick-up means for capturing a subject image, and encoding means for encoding the natural-image signal of the subject image captured by said image pick-up means.

7. An apparatus according to claim 1, wherein said artificial-image input means comprises storage means for storing a plurality of types of model data for generating the artificial-image signal, and selector means for selecting a desired type of model data from the plurality of types of model data.

8. An apparatus according to claim 1, further comprising audio-signal input means for inputting an audio

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signal, wherein said transmission means also multiplexes the audio signal, and transmits the multiplexed audio signal.

9. An apparatus according to claim 6, wherein said encoding means encodes the natural-image signal according to an MPEG-4 system.

10. An apparatus according to claim 1, wherein the artificial-image signal is an animation image.

11. An image processing apparatus for decoding a multiplexed signal obtained by adaptively multiplexing an encoded natural-image signal and an encoded artificial-image signal according to a communication status of a communication network, said image processing apparatus comprising:

- a) receiving means for receiving the multiplexed signal;
- b) separation means for separating the received multiplexed signal into the natural-image signal and the artificial-image signal;
- c) natural-image decoding means for decoding the natural-image signal separated by said separation means; and
- d) artificial-image decoding means for decoding the artificial-image signal separated by said separation means.

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12. An apparatus according to claim 11, further comprising synthesizing means for combining the natural-image signal decoded by said natural-image decoding means and the artificial-image signal decoded by said artificial-image decoding means so as to generate a synthesized image signal.

13. An apparatus according to claim 12, further comprising display means for displaying the synthesized image signal obtained by said synthesizing means.

14. An apparatus according to claim 11, wherein the multiplexed signal is obtained by multiplexing the natural-image signal and the artificial-image signal so that one screen includes the natural-image signal and the artificial-image signal.

15. An apparatus according to claim 11, wherein a ratio of the natural-image signal to the artificial-image signal in one screen is changed according to the communication status.

16. An apparatus according to claim 11, wherein the artificial-image signal is substituted for an object image

forming the natural-image signal.

17. An apparatus according to claim 11, further comprising audio decoding means for decoding an encoded audio signal, wherein the encoded audio signal is multiplexed in the multiplexed signal, and said separation means separates the audio signal, and said audio decoding means decodes the separated audio signal.

18. An apparatus according to claim 11, wherein the artificial-image signal is an animation image.

19. An image processing method comprising:

- a) a natural-image input step of inputting a natural-image signal obtained by encoding a natural image;
- b) an artificial-image input step of inputting an artificial-image signal obtained by encoding an artificial image; and
- c) a transmission step of adaptively multiplexing the natural-image signal and the artificial-image signal according to a communication status of a communication network, and transmitting a resulting multiplexed signal via the communication network.

20. A computer-readable storage medium in which

computer-readable program code for executing said image processing method set forth in claim 19 is stored.

21. Program software for controlling a computer to execute said image processing method set forth in claim 19.

22. An image processing method for decoding a multiplexed signal obtained by adaptively multiplexing an encoded natural-image signal and an encoded artificial-image signal according to a communication status of a communication network, said image processing method comprising:

- a) a receiving step of receiving the multiplexed signal;
- b) a separation step of separating the received multiplexed signal into the natural-image signal and the artificial-image signal;
- c) a natural-image decoding step of decoding the separated natural-image signal; and
- d) an artificial-image decoding step of decoding the separated artificial-image signal.

23. A computer-readable storage medium in which computer-readable program code for executing said image processing method set forth in claim 22 is stored.

24. Program software for controlling a computer to  
execute said image processing method set forth in claim 22.